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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,364	01/09/2002	Conor P. Morrison	MSFT125568	7247

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CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC  
1420 FIFTH AVENUE  
SUITE 2800  
SEATTLE, WA 98101-2347

EXAMINER
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NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/043,364	<b>Applicant(s)</b> MORRISON ET AL.	
	<b>Examiner</b> VAN H. NGUYEN	<b>Art Unit</b> 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 9/23/05.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

  
**WILLIAM THOMSON**  
**SUPERVISORY PATENT EXAMINER**

## DETAILED ACTION

1. Claims 1-34 are presented for examination.

### *Claim Rejections - 35 USC § 102*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 5-8, 10, 11, 14-16, 18-28, and 30-33 are rejected under 35 U.S.C. 102(e) as being anticipated by **Kossatchev et al.** (US 6698012 B1).

As to claim 23, Kossatchev teaches the invention as claimed including a computer-readable medium having stored thereon a data structure (see the abstract; col.1, lines 44-57; and col.3, lines 1-13), the data structure comprising:

a first data field containing data representing an application table (the test suite 22; col.3, lines 14-16), the application table comprising an application table entry (a set of programs and test data; col.3, lines 14-16); and

a second data field containing data representing a parameter table (test case parameter sources; col. 4, lines 11-13), the parameter table comprising a parameter table entry (test case parameters; col. 4, lines 11-13).

As to claim 24, Kossatchev teaches a third data field containing data representing a

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global initialize function (col.4, lines 31-37); a fourth data field containing data representing a global terminate function (col.15, lines 45-59); and a fifth data field containing data representing an application function (see the abstract and col.1, lines 44-57).

As to claim 25, Kossatchev teaches a sixth data field containing data representing an application test function (testing procedures in parallel mode separately from the consecutive procedures; col.1, lines 49-57).

As to claim 26, Kossatchev teaches a sixth data field containing data representing a number of times to call the application function (col.4, lines 55-63).

As to claim 27, Kossatchev teaches a seventh data field containing data representing an application post function (col.3, lines 60-63).

As to claim 28, Kossatchev teaches an eighth data field containing data representing an application post test function (col.4, lines 55-60).

As to claim 30, Kossatchev teaches a third data field containing data representing a name of a parameter (col.4, lines 26-27); a fourth data field containing data representing a type of the parameter (col.4, lines 27-30); and a fifth data field containing data representing a value of the parameter (col.4, lines 34-37).

As to claim 31, Kossatchev teaches a second application table entry (col.3, lines 14-16).

As to claim 32, Kossatchev teaches a second parameter table entry (col.4, lines 11-17).

As to claim 33, Kossatchev teaches a third data field containing data representing a module initialize function (col.4, lines 31-37 and col.9, lines 37-43); and a fourth data field containing data representing a module terminate function (col.15, lines 45-59).

As to claim 16, Kossatchev teaches the invention as claimed including a computer-

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readable storage medium having stored thereon a data structure (see the abstract; col.1, lines 44-57; and col.3, lines 1-13), the data structure comprising:

a first data field containing data representing a global initialize function (generates the test driver sources...fulfill functions to initialize the procedure interface 4, prepare input values, call tested procedures with test case parameters; col.4, lines 31-37 and col.9, lines 37-43);

a second data field containing data representing a global terminate function (checks the script driver call conditions and termination correctness...controls and manages test sequence execution; col.15, lines 45-59); and

a third data field containing data representing an application function (parallel procedures, consecutive procedures; see the abstract and col.1, lines 44-57).

As to claims 18-21, refer to claims 25-28 above for rejection.

As to claim 1, the rejections of claims 16 and 23 above are incorporated herein in full. Additionally, Kossatchev further teaches selecting an application table entry and running a sub-application referenced by the selected application table entry with one or more parameters referenced by one or more parameter table entries (select needed test case parameters. The test case parameters are represented by these constant arrays and programs...the test drivers execute tests on the SUT 3 using the test case parameters; col.4, lines 11-22).

As to claim 3, refer to claim 33 above for rejection.

As to claim 5, Kossatchev teaches selecting each application table entry in the application table (col.4, lines 11-22); and processing each selected application table entry (col.4, lines 23-30).

As to claim 6, Kossatchev teaches collecting data specifying that a sub-application should

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not be run; and wherein selecting comprises selecting an application table entry other than one that references the specified sub-application (col.4, lines 11-37).

As to claim 7, Kossatchev teaches collecting data specifying a value of a parameter; collecting data specifying a sub-application; and wherein processing further comprises: if the application table entry being processed references the specified sub-application, then using the specified value of the parameter (see fig.10 and the associated text).

As to claim 8, Kossatchev teaches collecting data specifying a type of error; collecting data specifying a sub-application; collecting data specifying an error response action; and wherein processing further comprises: if the application table entry being processed references the specified sub-application, and if the specified sub-application generates an error of the specified type, then performing the specified error response action (col.4, lines 55-63; col.7, lines 37-49; and col.8, lines 23-29).

As to claim 10, “a computer-readable storage medium having instructions” is inherent to the system of Kossatchev.

As to claim 11, the rejections of claims 16 and 23 above are incorporated herein in full. Additionally, Kossatchev further teaches collecting data specifying one or more sub-applications composing the application (the test suite 22 is set of programs and test data; col.3, lines 14-16); collecting data specifying one or more parameters to the one or more sub-applications (generating test case parameters...generate constant arrays and programs that generate and select needed test case parameters; col.4, lines 11-17); and creating a reference to a type of the parameter (a test case is defined by a procedure name and its parameters; col.4, lines 25-30).

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As to claim 14, Kossatchev teaches adding to the framework module a reference to a module initialize function (col.4, lines 31-37 and col.9, lines 37-43); and adding to the framework module a reference to a module terminate function (col.15, lines 45-59).

As to claim 15, “a computer-readable storage medium having instructions” is inherent to the system of Kossatchev.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 4, 9, 12, 13, 17, 29, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kossatchev et al.** in view of **Grey et al.** (US 6,754,850 B2).

As to claims 2, 12, and 17, Grey teaches creating a reference to at least one of the global initialize and global terminate functions comprises creating a NULL reference (col.23, lines 23-33).

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine the teachings of Grey with Kossatchev because Grey’s teachings would have provided the capability for efficiently testing behavior of procedures in Kossatchev’s system.

As to claims 4, 13, 22 and 29, Kossatchev does not specifically teach the use of threads.

Grey teaches the use of threads (see the abstract; col.3, lines 46-63; and col.7, lines 29-61).

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine the teachings of Grey with Kossatchev because Grey's teachings would have provided the enhanced capability for performing desired tests of a unit under test by testing a group of units simultaneously.

As to claim 9, Grey teaches the error response action is in the set: break into a debugger, exit without clean up; terminate all threads; exit immediately (col.17, lines 25-47; col.20, lines 45-67).

As to claim 34, Kossatchev teaches a third data field containing data representing a module check function (col.7, lines 44-48). Grey teaches a fourth data field containing data representing a module clean up function (col.20, lines 54-67).

### ***Response to Arguments***

4. Applicant's arguments filed 23 September 2005 have been fully considered but they are not persuasive.

In the remarks, Applicant argued in substance that (a) Kossatchev does not teach a first data field containing data representing an application table and a second data field containing data representing a parameter table; (b) Kossatchev does not teach a data structure comprising a third data field containing data representing a global initialize function; (c)



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Kossatchev does not teach a fourth data field containing data representing a global terminate Function.

Examiner respectfully traverses Applicant's remarks.

As to point (a), Kossatchev teaches a first data field containing data representing an application table (*e.g., see the test suit discussion beginning at col.3, line 14*) and a second data field containing data representing a parameter table (*e.g., see the test case parameters discussion beginning at col.4, line 11*).

As to point (b), Kossatchev teaches a third data field containing data representing a global initialize function (*e.g., the test driver generator... fulfil functions to initialize the procedure interface; col.4, lines 31-37*).

As to point (c), Kossatchev teaches a fourth data field containing data representing a global terminate function (*e.g., see the test execution discussion beginning at col.15, line 45*).

Accordingly, the combination of Kossatchev and Grey meets the limitations as broadly claimed by the Applicant.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

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policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

6. Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM THOMSON can be reached at (571) 272-3718.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent


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Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner for patents  
P O Box 1450  
Alexandria, VA 22313-1450

Van H. Nguyen

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER